

Forum Insights

USING VALUES-BASED DIGITAL TECHNOLOGY TO ENHANCE AND EVALUATE INTER-PROFESSIONAL EDUCATION (IPE)

Overview of the project as it has developed

Interprofessional education (IPE) takes place when at least two professions learn with, from and about one another to enhance collaborative practice. A six week IPE values-based decision-making programme was developed and delivered using the online Values Exchange Network (VX) developed by Professor Seedhouse. The content of the IPE programme focused on values based decision making and ethically problematic health care situations.

It was planned to simultaneously deliver the programme to pre-registration health and social care students across University College Dublin (UCD) and National University of Ireland, Galway (NUI Galway). However, due to various difficulties including different semester start dates, it was decided to implement in NUI Galway only in semester 2 (January 2015) while the revised programme would be implemented with students from NUI Galway and UCD in semester 1 (September 2015). In total, 166 students consented to enrol in the programme and have their data analysed for research purposes. Students involved were undertaking pre-registration courses in medicine, nursing, occupational therapy, speech and language therapy and social care.

Ethical approval was obtained to evaluate the project. A sequential exploratory mixed methods design was used. In phase one a qualitative interpretive descriptive design using focus group interviews (n=47) was conducted. Students' attitudes toward IPE were also assessed using the Readiness for Interprofessional Learning Scale (RIPLS) and the Interdisciplinary Education Perception Scale (IEPS) questionnaires (n=36 and n=39 respectively) at the start and end of the programme. To ensure a comprehensive evaluation, a survey questionnaire based on the student focus group data was created and completed by 122 students. In week 6 on the online VX system, students were also asked to describe their decision making then compared to Week 1. This was completed by 77 students.

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Key outcomes of the project (link to any available material/resources)

Four main themes were identified from the student focus groups: the meaning of IPE, impact of IPE on learning, barriers to IPE and strategies to facilitate IPE.

Most participants reported that IPE involved learning with other professions, learning about their opinions and values and using this learning when making healthcare decisions. Most students reported that the IPE programme prepared them for clinical practice. It promoted critical thinking and in particular it highlighted the need to respect and listen to the perspective of other health and social care professionals and appreciate the respective roles of health and social care professionals. Many students indicated that they enjoyed the interprofessional aspect of the programme and that the programme made them think about issues in a new way and prompted them to reflect on their decision making. Others reported that the content of the programme highlighted the important role of values in decision making. The majority of students reported that the IPE programme was an excellent concept and that the course had huge potential for learning. However, they also acknowledged that the programme was only evolving and required improvement. Barriers to the IPE programme revolved around five subcategories: The VX online system, ECTS and workload, insufficient instruction and training, unequal involvement of disciplines and the size and constituents of the groups. Students identified a number of strategies that would enhance and improve the IPE programme. These were mainly the reverse of the identified barriers and included: simplification of the VX online system, review workload and distribution of ECTS, make the course compulsory with allocated credits, improve the instructions and training and have smaller IPE groups. Two focus groups were also conducted with the staff (n=7) who facilitated the programme to capture their perspectives. Like students, most facilitators identified challenges with the VX system and the imbalance of disciplines within the project. But facilitators also identified challenges regarding their own participation in terms of time and prioritising facilitation in their daily work.

The results from the RIPLS and IEPS questionnaires (n=36 and n=39 respectively) RR (21.7%; 23.5%) indicated that students had

a positive perception of and attitude toward interprofessional learning and education. Although there were no significant differences found overall in attitudes towards IPE pre and post the programme, a significant difference ($p < 0.05$) was found in one item - the competency and autonomy subscale of the IEPS. This suggests that after the programme students perceived they were more competent and autonomous as individuals in their own profession and in the respect shown by other professions.

Evaluation questionnaires were returned giving a 73.5% response rate ($n=122$). Overall, students appeared to gain knowledge and understanding about interprofessional learning and collaborative and interprofessional practice. Most students agreed/strongly agreed that IPE is relevant for practice and that the online values based IPE programme prepared them for clinical practice, helped them to understand how they could improve their practice and provided them with a new way of looking at issues relevant to practice. Most also agreed/strongly agreed that it was useful to their learning, developed their critical thinking, and has a lot of potential to contribute to IPE. However, most students disagreed/strongly disagreed with the statement that the 'the online values based IPE programme was overall a positive experience'. Most also disagreed/strongly disagreed that the interface of the online programme was easy to navigate and that the polls, surveys and XP points contributed to their learning and understanding of IPE. Students were in one large interprofessional group at the start of the programme and most students agreed/strongly agreed that they found it difficult to follow the online comments and that smaller mixed interprofessional groups for the entire programme would have enhanced their learning. Most students agreed/strongly agreed that the lack of participation and involvement of other professions/disciplines hindered their learning. Most students disagreed/strongly disagreed that the IPE programme is best delivered through the current online VX system. When specifically asked if Blackboard, the main digital medium used in the university which students are somewhat familiar with, would be a better platform, most agreed/strongly agreed that the programme would be best delivered via this system. The majority of students agreed/strongly agreed that they would not recommend the current IPE programme with the same content and delivery format to other students.

Outline how the project benefits the higher education sector nationally

This project benefits the higher education sector nationally in a number of ways: IPE is recommended nationally as a core principle which should underpin the education and training of health and social care professions (HSE 2009). This project supports these recommendations. Secondly, this project introduces a new and innovative teaching and learning method for educators across Ireland. Thirdly, it indicates the potential of IPE to better prepare students for the transition into the workforce. Fourthly, the programme content and clinical case scenarios can be made available to other institutions interested in introducing an online IPE project. Fifthly, it provides insight into the effective use of digital technologies in teaching and learning by exploring and testing the use of the VX network as a medium to deliver IPE in the higher education institutions. The findings provide a list of recommendations to improve the process and allow other higher education sectors nationally to

learn from and build further on this work. Finally, this project demonstrates the ability of an online IPE programmes to enrich student learning. It therefore has the potential to change the way in which other institutes or universities deliver health and social care programmes, in particular in the area of IPE.

Outline how the project benefits students

This project benefits students in a number of ways: It introduces students to IPE and provides them with the opportunity to meet and learn with and from other health and social care students. It prepares students for the transition from education to employment in the health sector. It encourages and facilitates students to gain insight into their own and others values which influence decision making and collaborative practice. It builds students' capacity for critical thinking and promotes student interaction and engagement with material which is often delivered in a decontextualized manner, making it more relevant to clinical practice thereby helping to reduce the practice theory gap. Finally, the findings from this project reveal that an IPE programme is acceptable to students, they value the concept and appreciate its potential to enhance learning, collaborative practice and the quality of patient care. This project therefore confirms the importance and value of IPE for health and social care students.

Outline national/international development work that complements this project

The World Health Organisation Framework for Action on Interprofessional Education and Collaborative practice (WHO, 2010), HSE report on the education and development of Health and Social Care Professionals in Health Services 2009-2014 (HSE, 2009) and a recent Lancet journal commissioned report (Frenk et al, 2010) recommend IPE for a collaborative-ready healthcare workforce. However, recent reviews conducted in the area of IPE have determined that further high quality research is necessary in the areas of evaluating the benefits of using IPE (Abu-Rish et al, 2012; Lapkin et al, 2013; Reeves et al, 2013 and). This project therefore goes some way to fill this existing knowledge gap.

Technology is emerging as a valuable method to deliver IPE (WHO, 2010). Furthermore, many national and international reports acknowledge the role of technology to strengthen and support collaborative practice (Frenk et al, 2010, Department of Education and Skills, 2011, National Forum for the Enhancement of Teaching and Learning in Higher Education, 2015, New Media Consortium, 2015). However, the need for more rigorous evaluations on the use of information and communication technology mediated IPE programmes has been highlighted (Curran et al, 2015). This current project therefore compliments and supports the recommendations in the national and international literature. It tests and evaluates the use of an online digital technology platform to deliver IPE, provides evidence as to the effectiveness of this approach and highlights areas that require attention and further work.

The findings from this project to date are also complimented and supported by other work, many of whom have used digital technology to implement IPE (Cusack and O'Donoghue, 2012, Cusack et al, 2012, Cartwright et al, 2013, Evans et al, 2013, Mc Kenna et al, 2014, Myers and O'Brien, 2015). These

studies report similar challenges as identified in the current project particularly in relation to difficulties obtaining post course evaluations from students and difficulties when a mix of compulsory and voluntary students are enrolled in the programme. These studies found, similar to the findings in the current project, that students are generally positive about the experience of IPE and the learning they achieved. This current project therefore compliments and supports the recommendations in the national and international literature.

Next steps

Review and revise the content and delivery of the programme in light of the findings from the evaluation. Introduce the revised programme in Semester 1 (September 2015) to health and social care students in UCD and NUI Galway. Evaluate the revised programme and complete report by 30th December 2015.

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